

WISHA REGIONAL DIRECTIVE

WISHA Services

Department of Labor and Industries

11.40 BLOODBORNE PATHOGENS

Date Issued: December 28, 2000

Table of Contents

I.	<u>Background</u>	2
	References	3
II.	<u>Scope and Application</u>	4
III.	<u>Interpretive Guidance</u>	4
	A. Scope and Application	4
	B. Definitions (WAC 296-62-08001(2))	7
	C. Exposure Control (WAC 296-62-08001(3))	8
	D. Methods of Compliance (WAC 296-62-08001(4))	9
	1. Universal precautions (WAC 296-62-08001(4)(a))	9
	2. Engineering or work practice controls (WAC 296-62-08001(4)(b))	10
	3. Criminal Evidence and Appropriate Engineering and Work Practice Controls	15
	4. Personal Protective Equipment (WAC 296-62-08001(4)(c))	16
	5. Housekeeping (WAC 296-62-08001(4)(d))	20
	6. Environmental Contamination (WAC 296-62-08001(4)(d)(ii))	20
	E. HIV and HBV Research Labs and Production Facilities (WAC 296-62-08001(5))	25
	F. Hepatitis B Vaccination and Post Exposure Evaluation (WAC 296-62-08001(6))	26
	G. Employee Information and Training (WAC 296-62-08001(7))	33
	H. Recordkeeping (WAC 296-62-08001(8))	35
	I. Application of Other Standards to Bloodborne Pathogen Hazards	36
IV.	<u>Special Enforcement and Consultation Protocols</u>	37
V.	<u>Conducting In-depth Bloodborne Pathogen Inspections and Consultations</u>	38
	A. Inspection Procedures	38
	B. Engineering Controls	38
	C. Training violations	41
	D. Confidentiality of Records	42
	<u>Appendices</u>	43

I. Background

In 1992, the Department of Labor and Industries (L&I) adopted the Bloodborne Pathogens Standard, found in Part J of Chapter 296-62 of the Washington Administrative Code (WAC). This WISHA standard is identical in substance to the federal rule on which it is based, adopted by the Occupational Safety and Health Administration (OSHA) in 1991.

The Bloodborne Pathogens Standard provides for employee protection from occupational exposure to blood or other potentially infectious materials (OPIM). After adopting the standard, L&I issued extensive guidance on its appropriate application, found in WRD 92-6 and its successor, WRD 92-6A.

In the years since the standard was first adopted, several issues have been addressed by subsequent policy documents. Particular questions in recent years have also been raised regarding the application of the engineering controls' requirements as they relate to safer needle devices. On November 5, 1999, federal OSHA issued an updated policy document, CPL 2-2.44D, providing guidance on the appropriate application of the federal standard. One of the most significant changes of the revised CPL is its discussion of the appropriate use of engineering controls in relation to needlestick injuries.

While the exact number of needlestick injuries in the United States is unknown, current estimates vary between 590,000 and 800,000 injuries annually. In Washington State, using similar calculations, L&I estimates there may be as many as 44,000 needlestick injuries each year.

When the WISHA Bloodborne Pathogens Rule was adopted in 1992, the variety of engineering controls available for needles and other sharp medical devices was limited. However, the 1991 preamble to the final federal rule stated that “with regard to percutaneous incidents, such as needlestick injuries, evidence indicated that most injuries were preventable . . . 75 percent of all exposure incidents are caused by disposable syringes . . . and could be prevented by using syringes which incorporate re-sheathing or retracting designs.” [56 Fed. Reg./64057 (1991)]. Since adoption of the state and federal standards, the number and assortment of effective engineering controls available to employers has increased substantially. There is now a large body of research and data available to L&I and to the public concerning the effectiveness of these engineering controls.

According to OSHA’s “Record Summary of the Request for Information on Occupational Exposure to Bloodborne Pathogens Due to Percutaneous Injury,” issued on May 20, 1999, use of effective engineering controls such as safer medical devices appears to be steadily increasing in some applications. Nearly every healthcare facility that responded noted a reduction in injuries after use of effective engineering controls. Most IV line access is now accomplished using safer devices. Engineering controls are an effective and feasible method of hazard control in many instances.

For further information on bloodborne pathogen exposure and related issues, the following resources may be consulted:

References:

- “Public Health Service Guidelines for the Management of Health-Care Worker Exposures to HIV and Recommendations for Post-exposure Prophylaxis,” Centers for Disease Control *Morbidity and Mortality Weekly Report (MMWR)*, May 15, 1998, Vol. 47, No.RR-7.
- “Recommendations for Follow Up of Health-Care Workers After Occupational Exposure to Hepatitis C Virus,” Centers for Disease Control *MMWR*, July 4, 1997, Vol. 46, No. 26.
- *Record Summary of the Request for Information on Occupational Exposure to Bloodborne Pathogens due to Percutaneous Injury (RFI)*, May 20, 1999.
- *Safer Needle Devices: Protecting Health Care Workers*, Directorate of Technical Support, Office of Occupational Health Nursing, October 1997.
- *Needlestick Injuries Among Health Care Workers: A Literature Review*, Directorate of Technical Support, Office of Occupational Nursing, OSHA, July 1998.
- International Health-Care Worker Safety Center, #407, Health Sciences Center, University of Virginia, Charlottesville, VA 22908, EPINet, Exposure Prevention Information Network, E-mail: epinet@virginia.edu.
- DHHS, Public Health Service, "FDA Safety Alert: Needlestick and Other Risks from Hypodermic Needles on Secondary IV Administration Sets - Piggyback and Intermittent IV," April 16, 1992.
- *Glass Capillary Tubes: Joint Safety Advisory About Potential Risks*, OSHA/NIOSH/FDA, February 1999, from Steve Witt to OSHA Regional Administrators. <http://www.cdc.gov/niosh/capssa9.html> accessed December 1999.
- “Selecting, Evaluating, and Using Sharps Disposal Containers,” DHHS (NIOSH) Publication Number 97-111, January 1998. <http://www.cdc.gov/niosh/sharps1.html> accessed December 1999.
- "Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Disease," Centers for Disease Control, *MMWR*, October 16, 1998/Vol.47/No. RR-19
- “Biosafety in Microbiological and Biomedical Laboratories,” Publication No. (NIH) 88-8395, May 1988).
- "Guideline for Infection Control in Health Care Personnel,” Centers for Disease Control, *American Journal of Infection Control*, June 1998, Vol. 26, 1998. <http://www.cdc.gov/ncidod/hip/Guide/guide.htm>.
- “Immunization of Health-Care Workers: Recommendations Centers for Disease Control,” *MMWR*, December 26, 1997, Vol.46, No.RR-18
- "Safety Feature Evaluation Forms," Training for Development of Innovative Control Technology Project.
- *NIOSH Alert, Preventing Needlestick Injuries in Health Care Settings*, DHHS (NIOSH) Publication No. 2000-108, November 1999. <http://www.cdc.gov/niosh/2000-108.html> accessed December 1999.
- Labor and Industries/WISHA web page at <http://www.lni.wa.gov/wisha/>

II. Scope and Application of WRD

This WISHA Regional Directive (WRD) applies to all WISHA activities involving WAC 296-62-08001, the Bloodborne Pathogens Standard (found in Part J of Chapter 296-62 WAC). As a result of minor changes requested by federal OSHA (relating to interrupted Hepatitis B vaccinations and found in III-F-8 on page 28 of this document), it replaces the July 3, 2000 version of WRD 11.40. The July 3 document replaced WRD 92-6A, WRD 93-3, WRD 11.45, and WISHA Interim Interpretive Memorandum 98-11-B.

III. Interpretive Guidance

A. Scope and Application of the Standard (WAC 296-62-08001(1))

1. *Which employers are covered by the Bloodborne Pathogens Standard?*

The standard applies to *all* employers subject to WISHA whose employees are exposed to blood or other potentially infectious materials in the course of their job duties. The scope is not limited to health care activities.

The following list *illustrates* a number of jobs that are typically associated with tasks that have occupational exposure to blood or other potentially infectious materials. The fact that a particular job is not on the list does *not* suggest that it falls outside the scope of the standard. At the same time, employees in jobs found on the list are covered only if they in fact have occupational exposure to blood or other potentially infectious materials.

- Physicians, physician's assistants, nurses, nurse practitioners, and other health care employees in clinics and physicians' offices;
- Employees of clinical and diagnostic laboratories;
- Housekeepers in health care facilities;
- Staff in laundries that service health care or public safety institutions;
- Tissue bank personnel;
- Employees in blood banks and plasma centers who collect, transport, and test blood;
- Freestanding clinic employees (for example, hemodialysis clinics, urgent care clinics, health maintenance organization (HMO) clinics, and family planning clinics);
- Employees in clinics in industrial, educational, and correctional facilities (for example, those who collect blood or clean and dress wounds);
- Employees assigned to provide emergency first aid;
- Dentists, dental hygienists, dental assistants and dental laboratory technicians;
- Staff of institutions for the developmentally disabled;
- Hospice employees;
- Home health care workers;
- Staff of nursing homes and long-term care facilities;
- Employees of funeral homes and mortuaries;
- HIV and HBV research laboratory and production facility workers;
- Employees handling regulated waste;
- Medical equipment service and repair personnel;
- Emergency medical technicians, paramedics, and other emergency medical service providers;
- Firefighters, law enforcement personnel, and correctional officers.

2. *When are **first-aid providers** covered by the standard?*

If the employer assigns an employee (either formally or informally) to provide first aid as part of his or her job duties, that employee is covered by the standard. If the employee is not required or expected to respond (in other words, if the employee's decision to provide first aid is a voluntary one), the employee is not covered simply because he or she has been trained in first aid by the employer. **See page 29** for further information on Hepatitis B Vaccine coverage for First-Aid trained employees.

3. *Are **employment agencies** responsible for providing protection from bloodborne pathogens to workers they refer to jobs that may involve exposure?*

An employment agency refers job applicants to potential employers but does not put these workers on the payroll or otherwise establish an employment relationship with them; thus, the employment agency is not the employer of these workers and is not subject to the requirements of the standard. The company that hires the workers (for example, a hospital) is the employer and is responsible for ensuring compliance with the requirements of the standard.

4. *Are **personnel services firms** responsible for providing protection from bloodborne pathogens for their employees assigned to work under another employer's control?*

Personnel services firms employ medical care staff and service employees assigned to work at hospitals and other healthcare facilities that contract with the firm. Typically, the employees are on the payroll of the personnel services firm, but the healthcare facility exercises day-to-day supervision over them. In these circumstances, the personnel services firm must ensure compliance with the following requirements but is not responsible for compliance with other sections of the standard:

- hepatitis B vaccinations;
- post-exposure evaluation and follow-up;
- recordkeeping under paragraph (h) of the standard;
- generic training;
- violations occurring at the healthcare facility about which the personnel services firm actually knew and where the firm failed to take reasonable steps to have the host employer (for example, a hospital) correct the violation; and
- pervasive serious violations at the healthcare facility about which the personnel services firm would have known with the exercise of reasonable diligence.

5. *Are **host employers** responsible for providing protection from bloodborne pathogens for the employees of a personnel services firm assigned to work under their control?*

When the host employer exercises day-to-day supervision over the personnel services workers, the host employer is the controlling employer and must ensure compliance with all provisions of the standard with respect to these workers. With respect to Hepatitis B vaccination, post-exposure evaluation and follow-up, recordkeeping, and generic training, the host employer may fulfill his or her obligations by taking reasonable measures to assure that the personnel services firm has complied with these provisions.

6. *When must **contractors** and others providing services at work sites involving exposure to bloodborne pathogens comply with the standard?*

These companies provide a service, such as radiology or housekeeping, to host employers. They provide supervisory personnel, as well as rank-and-file workers, to carry out the service. These employers are responsible for ensuring compliance with site-specific requirements and all provisions of the bloodborne pathogens standard. The host employer remains responsible for ensuring hazards under his or her control are corrected and the contractor's employees are protected from any hazards generated by the host.

7. *What obligations do **home health services** have under the standard?*

Home health care poses unique challenges for employers and employees alike. Given that the nature of the "worksites" is largely outside the control of home health service employers, employers can not be held responsible for certain site-dependent provisions. However, home health service employers are required to provide appropriate PPE for the duties anticipated for usual care of patients, use of engineering controls where sharp devices are provided by the employer, and training appropriate to all aspects of the standard. Such training includes, but is not limited to, use of PPE and safer devices, handwashing, and handling of regulated waste.

The employer must comply with all other requirements of the standard, including non-site specific exposure control plan requirements, hepatitis B vaccinations, post exposure evaluation and follow-up, recordkeeping, and generic training.

8. *When are **physicians** covered by the standard?*

Physicians may be employers or employees. Physicians who are sole proprietors or partners in a *bona fide* partnership must protect anyone they employ (such as a technician or secretary) in compliance with the standard. Physician-employers also must prevent exposure of any employees (whether their own employees or not) to bloodborne pathogens hazards created or controlled by the physicians at hospitals or other sites where they have staff privileges.

Because physicians in these situations are not employees, they are not required to comply with the requirements of the standard in relation to their own exposure.

In other situations, physicians may be employed by a hospital or other health care facility and must be protected from exposure by their employer, in compliance with the standard. They also may be members of a professional corporation. In general, such corporations are the employers of their physician-members and must comply with the hepatitis B vaccination, post-exposure-evaluation and follow up, recordkeeping, and generic training provisions with respect to these physicians when they work at host employer sites (see guidance on contractors in "6" above).

9. *When must an employer protect **students** exposed to bloodborne pathogens or other potentially infectious material?*

WISHA jurisdiction extends only to employees. It does not extend to students not compensated in some fashion for their work or otherwise considered employees. Examples of compensation which would result in WISHA jurisdiction, include but is not limited to, the payment of stipends, meals, parking, uniforms, etc. Such compensation may also take the form of medical insurance benefits or workers compensation coverage. Reasonable reimbursement of expenses is not considered compensation.

B. Definitions (WAC 296-62-08001(2))

1. *"Blood"*: The term "human blood components" used in the definition includes plasma, platelets, and serosanguinous fluids (for example, exudates from wounds). Also included are medications derived from blood, such as immune globulins, albumin, and factors 8 and 9.
2. *"Bloodborne Pathogens"*: While hepatitis B virus (HBV) and human immunodeficiency virus (HIV) are specifically identified in the standard, the definition is not exclusive and the term includes any pathogenic microorganism present in human blood or OPIM that can infect and cause disease in persons exposed to blood containing the pathogen. Pathogenic microorganisms can also cause diseases such as hepatitis C, malaria, syphilis, babesiosis, brucellosis, leptospirosis, arboviral infections, relapsing fever, Creutzfeldt-Jakob disease, adult T-cell leukemia/lymphoma (caused by HTLV-I), HTLV-I associated myelopathy, diseases associated with HTLV-II, and viral hemorrhagic fever.

According to the Centers for Disease Control and Prevention (CDC), hepatitis C virus (HCV) infection is the most common chronic bloodborne infection in the United States. (*MMWR: Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Disease, October 16, 1998/Vol. 47/No. RR-19*). HCV is a viral infection of the liver transmitted primarily by exposure to blood. There is no current vaccine against HCV.

3. *"Exposure Incident"*: "Non-intact skin" as used in the definition includes skin with dermatitis, hangnails, cuts, abrasions, chafing, acne, etc.
4. *"Engineering controls"*: This term refers to controls that isolate or remove the bloodborne pathogens hazard from the workplace. Examples include needleless devices, shielded needle devices, blunt needles, plastic capillary tubes. Sharps disposal containers are also engineering controls, although they are generally less effective than other controls and therefore may not be relied upon when more effective controls are available.
5. *"Occupational Exposure"*: The term "reasonably anticipated contact" used in the definition includes potential contact as well as actual contact with blood or other potentially infectious material. Lack of history of blood exposures among designated first aid personnel in a particular manufacturing site, for instance, does not preclude coverage. "Reasonably anticipated contact" includes, among other things, both contact and exposure to potentially contaminated needles and other regulated waste.

6. *"Other Potentially Infectious Materials" (OPIM)*: This term includes blood and tissues of experimental animals infected with HIV or HBV or other pathogens.

C. Exposure Control (WAC 296-62-08001(3))

This section requires the employer to identify those tasks and procedures in which occupational exposure may occur and to identify the positions whose duties include those tasks and procedures identified as having occupational exposure. The exposure control plan ((3)(a)) and exposure determination ((3)(b)) are key provisions of the standard because they identify individuals who will receive the training, protective equipment, vaccination, and other protections of the standard.

1. *Does the Exposure Control Plan have to be a separate document, or can it be part of a larger document?*

While the plan may be part of a larger document, such as the Accident Prevention Program, it must be accessible to employees. This requires it to be a cohesive entity in its own right unless there is a guiding document that states the overall policy goals and references the elements of existing separate policies that together make up the plan.

2. *Are annual updates of the plan sufficient?*

Annual updates are a minimum requirement of WAC 296-62-08001(3)(a)(iv). Updates are also required whenever necessary to reflect changes in the tasks, procedures, or employees covered by the standard.

3. *Must employers subject to the Bloodborne Pathogens Standard update their exposure control plan to reflect the use of engineering controls, including safer needle devices?*

Yes. WAC 296-62-08001(3)(ii) requires the exposure control plan to contain several elements, including methods of compliance. WAC 296-62-08001(3)(iv) requires the exposure control plan to be reviewed and updated at least annually and whenever necessary to reflect new or modified tasks and procedures which affect occupational exposure and to reflect new or revised employee positions with occupational exposure. According to the preamble to the federal standard on which the state standard is based, the requirement to review and update the plan means that the plan and the controls upon which it relies must reflect changes in technology that can eliminate or reduce exposure to bloodborne pathogens. The required periodic review ensures that the exposure control plan remains current with the latest information and scientific knowledge pertaining to bloodborne pathogens. The exposure control plan must document consideration and implementation of appropriate commercially available and effective engineering controls designed to eliminate or minimize exposure.

4. *Where must the plan be located?*

The location of the plan may be adapted to the circumstances of a particular workplace, provided employees can access a copy at the workplace, during the workshift (for example, if the plan is maintained solely on computer, employees must be trained to operate the computer). WAC 296-62-08001(3)(a)(iii) also requires a hard copy of the exposure control plan to be made available to the employee within 15 working days of the employee's request.

5. *Can an employer who lacks an exposure control plan be found in violation of the other requirements of the standard as well?*

Yes. If a facility is lacking an exposure control plan and the other requirements of the standard have not been implemented, the employer is also in violation of the other relevant paragraphs of the standard in addition to those found in (3). Such violations normally will be considered serious violations of the standard.

6. *If an employer leaves a job off the list of those jobs having occupational exposure but all employees in that job are protected in accordance with the remainder of the standard, is that a violation of the standard?*

Yes. If a job classification, task, or procedure involving occupational exposure is omitted from the list, the employer is in violation of the standard. However, if all employees in the job or performing the task or procedure have been included in all other aspects of the plan as implemented (for example, vaccinations, training, etc.), the violation will be considered a general violation.

7. *How do existing recordkeeping requirements apply to bloodborne pathogen exposure incidents?*

For injury and illness log recordkeeping purposes, an occupational bloodborne pathogens exposure incident (for example, needlestick, laceration, or splash) is classified as an injury since it is usually the result of an instantaneous event or exposure.

Anticipated revisions to the federal and state recordkeeping standards may supersede this guidance.

D. Methods of Compliance (WAC 296-62-08001(4))

This section establishes the methods by which employers must protect their employees from the hazards of bloodborne pathogens and comply with this standard through the use of universal precautions, engineering controls, work practice controls, personal protective equipment, proper housekeeping, and handling of regulated waste.

1. Universal precautions (WAC 296-62-08001(4)(a))

What are “universal precautions” and when must they be used?

Employers covered by the standard must use universal precautions ((4)(a)) to protect employees from exposure to all human blood and OPIM. The term “universal precautions” refers to a concept of bloodborne disease control that treats all human blood and OPIM as infectious for HIV, HBV, HCV or other bloodborne pathogens regardless of the perceived “low risk” of a patient or patient population.

Body Substance Isolation (BSI) is another method of infection control. This method defines **all** body fluids and substances as infectious. BSI is an acceptable alternative to universal precautions – and in circumstances where it is impossible or difficult to differentiate between body fluid types it is required. If BSI is used facilities must adhere to all other provisions of this standard.

2. Engineering or work practice controls (WAC 296-62-08001(4)(b))

(See also specific guidance on structuring **Violations for Engineering Controls** in Section VI-B on page 39).

- a. *Can an employer covered by the BBP standard continue to rely on PPE if **effective engineering or work practice controls** are available?*

No. WAC 296-62-08001(4) establishes the methods by which employers must protect their employees from the hazards of bloodborne pathogens and comply with this standard through the use of universal precautions, engineering controls, work practice controls, personal protective equipment (PPE), proper housekeeping, and handling of regulated waste. WAC 296-62-08001(4)(b) requires the employer to institute engineering and work practice controls as the primary means of eliminating or minimizing employee exposure. The standard permits PPE to be used to address hazards only “where occupational exposure remains after institution of these [engineering and work practice] controls.”

This conforms to WISHA’s traditional adherence to a hierarchy of controls. Preventing exposure requires a comprehensive program, including engineering controls (for example, needleless devices, shielded needle devices, and plastic capillary tubes) and proper work practices (for example, no-hands procedures in handling contaminated sharps, eliminating hand-to-hand instrument passing in the operating room). If engineering and work practice controls do not eliminate exposure, personal protective equipment (for example, eye protection) is required.

Safer medical devices are generally of two types: changes to the systems for giving injections or accessing a vein or artery (i.e., retractable, self-sheathing or needleless systems), and sharp medical devices with engineered protection (for example, blunt suture needles). Substitution methods such as the use of plastic (instead of glass) capillary tubes are also available. The Appendices lists the WISHA web page that contains links to resources to assist in the evaluation of these devices. These forms can also be obtained from your local L&I hygiene consultation staff.

- b. *Does WISHA advocate the use of one particular device over another?*

No. The employer is responsible for the selection of a device that will eliminate the exposure or reduce it to the greatest degree feasible.

The federal Food and Drug Administration (FDA) is responsible for clearing medical devices for marketing; however, this “clearance” alone is not enough to guarantee the device will be effective in a particular workplace. The employer must consider any further evidence to ensure its effectiveness in his or her workplace.

The FDA has published specific design features for recessed needle systems, including the following characteristics:

- A fixed safety feature provides a barrier between the hands and the needle after use;
- The safety feature should allow or require the worker's hands to remain behind the needle at all times;
- The safety feature is an integral part of the device and not an accessory;
- The safety feature is in effect before disassembly and remains in effect after disposal to protect users and trash handlers, and for environmental safety;
- The safety feature is as simple as possible, and requires little or no training to use effectively.

c. ***Must employees be consulted in relation to the choice of effective engineering controls?***

WISHA encourages employers to involve employees in the selection of effective engineering controls to improve employee acceptance of the newer devices and to improve the quality of the selection process. Employees who use various types of devices or who are subject to exposure would provide useful input. There is no specific employee involvement required by WAC 296-62-08001. However, the general safety and health committee requirement (WAC 296-24-045(c)) notes that one of the duty's of the required safety and health committee is "an evaluation of the accident and illness prevention program with a discussion of recommendations for improvement where indicated".

At least half of the safety committee membership must be comprised of employee representatives. If the safety committee raises concerns about the selection of engineering controls in relation to the Bloodborne Pathogens Standard and those concerns are shared with those with authority to act and are not addressed (or least responded to) in some fashion, an employer would be in violation of the safety committee requirements. Safety committees are required for all employers with more than 10 employees; those with less than 10 employees must conduct safety meetings on a regular basis. See WAC 296-24-045 for more details.

d. ***What are an employer's responsibilities to maintain engineering controls?***

WAC 296-62-08001(4)(b)(ii) requires that engineering controls be examined and maintained or replaced on a regular schedule to ensure their effectiveness. Regularly scheduled inspections are required to confirm, for instance, that engineering controls such as safer devices continue to function effectively, that protective shields have not been removed or broken, and that physical, mechanical or replacement-dependent controls are functioning as intended.

- e. *When are **handwashing facilities** required and what are their essential characteristics?*

WAC 296-62-08001(4)(b)(iii) through (4)(b)(vi) requires employers subject to the standard to provide handwashing facilities that are readily accessible to employees. Handwashing with soap and at least tepid running water must be performed as soon as feasible especially after removal of gloves or other Personal Protective Equipment (PPE), and particularly in cases of gross contamination, to adequately flush contaminated material from the skin. For handwashing facilities to be considered readily accessible, they must be at a reasonable distance and employees must not be required to thread their way through doorways and/or stairs, creating a reasonable risk of environmental surface contamination.

- f. *When are **alternatives** to handwashing procedures acceptable?*

The use of alternative handwashing methods is permitted as an interim measure when soap and water are not a feasible means of washing the hands or other parts of the body. In such cases, the employer must provide either antiseptic hand cleaner and clean cloth/paper towels, or antiseptic towelettes. When these types of alternatives are used, employees must wash their hands (or other affected area) with soap and running water as soon as feasible thereafter.

These types of alternative washing methods may be in use by ambulance-based paramedics and emergency medical technicians (EMTs), firefighters, police, and mobile blood collection personnel who are exposed to blood or OPIM with no means of washing up with running water (for example, a crime scene, traffic accident, fire).

- g. *When **recapping** is necessary, is the **one-hand scoop method** acceptable in recapping needles?*

The use of the properly performed one-hand scoop method (in which the hand holding the sharp is used to scoop up the cap from a flat surface) for recapping is a recognized and acceptable method. However, the scoop method must be performed in a safe manner and must also be limited to situations in which recapping is necessary (WAC 296-62-08001(4)(b)(vii)).

- h. *How can an employer demonstrate that no alternative to **bending, recapping, or removing contaminated needles** exists?*

One acceptable means of demonstrating that no alternative to bending, recapping, or removing contaminated needles is feasible or that such action is required by a specific medical or dental procedure (WAC 296-62-08001(4)(b)(vii)(A)) would be a written justification, supported by reliable evidence, included as part of the exposure control plan. To ensure compliance, such a justification must state the basis for the employer's determination that no alternative is feasible or must specify that a particular medical procedure requires, for example, the bending of the needle and the use of forceps to accomplish this.

- i. *Must containers for **reusable sharps** meet all the requirements for disposable sharps containers?*

Reusable sharps such as large bore needles, scalpels, and saws pose the same percutaneous exposure hazard as disposable sharps and must be contained in a manner that eliminates or minimizes the hazard until they are reprocessed. Therefore, the containers for reusable sharps must meet the same requirements as containers for disposable sharps with the exception that they are not required to be closable, since it is anticipated that containers used for collecting and holding reusable sharps will themselves be reused.

- j. *Is **hand cream** considered prohibited in areas where there is a reasonable likelihood of bloodborne pathogens exposure?*

No. Hand cream is not considered a "cosmetic" in the context of WAC 296-62-08001(4)(b)(ix) and is permitted. It should be noted that some petroleum-based hand creams can adversely affect glove integrity (i.e. those that list a petroleum product as the first ingredient), and the handwashing requirements of paragraph (4)(b)(v) and (4)(b)(vi) must be followed. To reduce the occurrence of dermatitis, it is important that hands are thoroughly dried after washing and prior to donning gloves.

- k. *Does the prohibition on **eating, drinking and certain other activities** apply to all work areas frequented by employees who have occupational exposure to bloodborne pathogens?*

No. Work areas subject to WAC 296-62-08001(4)(b)(ix) are those where work involving exposure or potential exposure to blood or OPIM exists, along with the potential contamination of surfaces. Employees are permitted to eat and drink in an ambulance cab, for example, as long as the employer has implemented procedures to permit employees to wash up and change contaminated clothing prior to entering the ambulance cab, and to ensure that patients and contaminated material remain behind the separating partition.

- l. *Must an employer take precautions concerning storage of **sealed food or drink containers**?*

Yes. In addition to direct contamination of food or drink by blood or OPIM, the employer must keep in mind that containers of food and beverage may also become contaminated and result in unsuspected contamination of the hands. The key to compliance with WAC 296-62-08001(4)(b)(x) is to determine whether food and drink may be contaminated as a result of leakage/spilling of specimen containers, contact with contaminated items, or the performance of activities (for example, laboratory analysis) that could generate splashes, sprays, or droplets of blood or OPIM.

- m. *Must an employer be concerned with **spraying and splashing** of infectious materials if employees are protected from direct exposure?*

Yes. The intent of WAC 296-62-08001(4)(b)(xi) is not only to decrease the chances of direct employee exposure through spraying or splashing of infectious materials onto employees, but also to reduce contamination of surfaces in the general work area.

Surgical power tools, lasers, and electrocautery devices may generate aerosols as well as be a source for splashing and spattering. Some of these devices include labeling recommendations such as local exhaust ventilation. The employer is responsible for appropriate operation of these devices, including controls recommended by the manufacturer.

Typically, reasonably anticipated spattering or generation of droplets would necessitate use of eye protection and mask or a face shield to prevent contamination of the mucous membranes of the eyes, nose, and mouth.

The use of sprays, brushes, and high pressure in equipment lines is particularly hazardous. An employer will normally be in violation if cleaning procedures cause unnecessary splashing, spraying, spattering, or generation of droplets of blood or OPIM.

n. *Is “DeLee suctioning” permitted?*

While mouth pipetting/suctioning is expressly prohibited by WAC 296-62-08001(4)(b)(xii), WISHA allows a recognized emergency care method of clearing an infant’s airways called “DeLee suctioning” in an emergency when no other method is available, and only provided that a trap to prevent suctioned fluid from reaching the employee’s mouth is inserted in-line between the infant and the employee.

o. *How are labeling requirements applied to **extracted teeth, gall stones and kidney stones**?*

Extracted teeth that are being discarded or used as specimens are subject to the containerization and labeling provisions of the standard. However, WISHA does not issue citations for dentists and doctors for non-employee exposures. Extracted teeth, gallstones and kidney stones may be given to the patients. In these situations, the teeth and stones are not subject to the container and labeling provisions of the standard.

p. *How are bloodborne pathogen requirements applied to transport of materials in **pneumatic tubes**?*

The use of pneumatic tube systems for transport of small materials in hospitals often includes transmittal of laboratory specimens and other more fragile items. Employers’ primary concern in the transport of clinical specimens in a pneumatic tube system is leakage of the specimen into the carrier and potentially into the system tubing. Some systems have virtually eliminated breakage as a cause of leakage by means of padded inserts for carriers and soft delivery of the carrier. Leakage generally results from improper packaging and/or the use of primary containers that do not prevent leakage during transport.

The employer also must ensure that all employees who might open a carrier are trained to regard the contents as biohazardous in nature. Employers must comply with the glove requirements of WAC 296-62-08001(4)(c) when removing specimens from the tube system carrier, as it may be contaminated with leakage. They must also train employees in decontamination of the carrier and, if need be, the tube system in accordance with WAC 296-62-08001(7)(b).

All precautions and standards for manual transport of specimens also apply to the automated transport of specimens (for example, the container and tagging/labeling requirements of WAC 296-62-08001(4)(b)(xiii)(A) and the secondary container requirements of WAC 296-62-08001(4)(b)(xiii)(B) and (C)).

- q. *How must an employer ensure that heavily soiled equipment is effectively decontaminated?*

WAC 296-62-08001(4)(b)(xiv) requires decontamination of equipment prior to servicing or shipping unless such decontamination is not possible (in which case labeling and other methods of sharing information must be used). When reusable equipment that is heavily soiled must be decontaminated, the employer must ensure that sufficient prewashing occurs before decontamination because most disinfectants/sterilants cannot sufficiently penetrate the organic material that may remain on heavily soiled equipment.

3. Criminal Evidence and Appropriate Engineering and Work Practice Controls

WISHA recognizes both the risks involved in the storage of criminal evidence contaminated by blood and other potentially infectious materials and the unique circumstances involved in such situations.

- a. *Is exposure to **criminal evidence** subject to the requirements of the bloodborne pathogens standard?*

Yes. Criminal evidence (for example, clothing and other items) contaminated with blood or other potentially infectious materials falls under the scope of the standard and is considered a specimen as used in WAC 296-62-08001(4)(b)(xiii). The provisions regarding the handling of specimens require that they "be placed in a container that prevents leakage during collection, handling, processing, storage, transport, or shipping." In addition, the rule states "if outside contamination of the primary container occurs, the primary container shall be placed within a second container which prevents leakage."

- b. *Is full compliance with the bloodborne pathogens requirements feasible for law enforcement employers collecting and preserving criminal evidence?*

Full compliance is not feasible in all cases. Law enforcement agencies have the responsibility of collecting and preserving physiological evidence for future analysis and to protect it from contamination. Of all the common types of evidence found at crime scenes, blood is one of the most fragile.

Current forensic practice dictates that specific collection and packaging procedures be followed in order to *minimize deterioration* of the specimen. Wet or damp bloodstains packaged in airtight containers, such as plastic bags, will deteriorate and become useless in a very short time period. Specifically, packaging as described by the BBP standard would accelerate deterioration of the specimen and as a result would be prohibited for extended storage time periods.

- c. *In such cases, what is the maximum feasible protection under the standard?*

In view of this, law enforcement employers must air dry blood-soaked criminal evidence as soon as possible following collection and place the items in brown (unbleached) heavy paper bags (for example, Kraft paper) for storage. Personnel required to handle and prepare specimens (for example, collecting officers, forensic scientists, and court employees) must use appropriate personal protective equipment at all times and the employer must comply with all other applicable provisions of the standard.

4. Personal Protective Equipment (WAC 296-62-08001(4)(c))

When there is occupational exposure, the employer must provide personal protective equipment (PPE) at no cost to the employee to prevent blood or OPIM from passing through to, or contacting, the employees' work or street clothes, undergarments, skin, eyes, mouth, or other mucous membranes. In determining the type and amount of required PPE, the employer must select PPE that will protect against contact with blood or OPIM based upon the type of exposure and quantity of these substances that can be reasonably anticipated during the performance of a task or procedure. Unless engineering controls and work practices have eliminated occupational exposure, the employer must ensure the use of PPE.

- a. *Must an employer pay for **laboratory coats or uniforms** worn by employees exposed to bloodborne pathogens?*

If laboratory coats or uniforms are intended to protect the employee's body from contamination, they are PPE and the employer must provide them to the employee at no cost. The employer is not obligated to provide general work clothes to employees, but *is* responsible for providing PPE. Similarly, such clothing must be laundered by the employer and not sent home with the employee for cleaning if it is used as PPE.

- b. *Can **fragile clothing** be relied upon as PPE?*

No. A gown that is frequently ripped or falls apart under normal use would not be considered "appropriate PPE."

The American Society for Testing and Materials (ASTM) has several complete testing and evaluation methods that can be used for assessing the resistance of materials used for PPE for medical use. (ASTM-F1819-98, ASTM-F-1671-97b, and ASTM-F1670-97)

- c. *Are **scrubs** considered PPE?*

Not ordinarily. Scrubs are usually worn in a manner similar to street clothing, and normally should be covered by appropriate gowns, aprons or laboratory coats when splashes to skin or clothing are anticipated.

d. *Should the employer take particular precautions with **pullover scrubs**?*

If a pullover scrub (as opposed to scrubs with snap closures) becomes minimally contaminated, employees should be trained in accordance with WAC 296-62-08001(7)(b)(vii)(G) to remove the pull-over scrub in such a way as to avoid contact with the outer surface; for example rolling up the garment as it is pulled toward the head for removal. If the amount of blood exposure is such that the blood penetrates the scrub and contaminates the inner surface, not only is it impossible to remove the scrub without exposure to blood, but the penetration itself would constitute exposure. It may be prudent to train employees to cut such a contaminated scrub to aid removal and prevent exposure to the face.

e. *When must **resuscitator devices** be available?*

The employer must make resuscitator devices readily available and accessible to employees who can reasonably be expected to perform resuscitation procedures. Emergency ventilation (resuscitator) devices also fall under the scope of PPE and hence must be provided by the employer for use in resuscitation (for example, masks, mouthpieces, resuscitation bags, and shields or overlay barriers). Improper use of these devices is a violation of WAC 296-62-08001(4)(c)(ii). Improper use would include failure either to follow the manufacturer's instructions or to comply with accepted medical practice.

f. *What are examples of the **exemption from the PPE requirements**?*

WAC 296-62-08001(4)(c)(ii), which requires the use of PPE, also provides for a limited exemption from the use of PPE, based on situations in which use of PPE would prevent the proper delivery of healthcare or public safety services, or would pose an increased hazard to the personal safety of the worker or co-worker. The following represents examples of when exemptions from the use of PPE could occur:

- A sudden change in a patient's status such as when an apparently stable patient unexpectedly begins to hemorrhage profusely, putting the patient's life in immediate jeopardy.
- A firefighter rescues an individual who is not breathing from a burning building and discovers that his/her resuscitation equipment is lost/damaged and he/she must administer CPR.
- A bleeding suspect unexpectedly attacks a police officer with a knife, threatening the safety of the officer and/or co-workers.

An employee's decision not to use PPE must be made on a case-by-case basis and must be prompted by legitimate and truly extenuating circumstances. In such cases, no violation exists if the employee temporarily and briefly abandons use of PPE and if the employer investigates and documents why PPE was not used to reduce the likelihood of a future (unprotected) incident.

g. *How must an employer meet the **accessibility requirements**?*

Under WAC subsection (4)(c)(iii), The employer is required to provide PPE in appropriate sizes and accessible locations. In addition, gloves, glove liners, powderless gloves, or other similar alternatives must be readily available and accessible at no cost to those employees who are allergic to the gloves normally provided (see Note below). Similar alternatives must supply appropriate barrier protection and must be approved by the FDA for use as a medical glove. WISHA staff should review the employer's program and, through employee interviews and inspection of places where PPE is kept, ensure that these provisions have been met.

NOTE: In accordance with a notice published in the Federal Register, Volume 62, No. 189, effective September 30, 1998, the FDA now requires labeling statements for medical devices which contain natural rubber and prohibits the use of the word “hypoallergenic” to describe such products. Additional information on the incidence of hypersensitivity reactions to natural rubber latex can be found in the following documents: 1) NIOSH Alert, Preventing Allergic Reactions to Natural Rubber Latex in the Workplace (Publication No. 97-135) published in June 1997, <http://www.cdc.gov/niosh/latexalt.html>; and 2) OSHA/Directorate of Technical Support, Technical Information Bulletin: Potential for Allergy to Natural Rubber Latex Gloves and other Natural Rubber Products, <http://www.osha-slc.gov/html/hotfoias/tib/TIB19990412.html>

If PPE is not provided at no cost to the employee, this would be a violation of section **(4)(c)(i)**. If PPE is not being used properly or the wrong PPE is used (for example, wearing a laboratory coat when a rubber apron is needed) or wearing the wrong size PPE, paragraph **(4)(c)(ii)** will be cited. If PPE is not available in appropriate sizes or readily accessible, a violation of paragraph **(4)(c)(iii)** exists. For example, the clothing of paramedics out on an emergency call may become blood soaked. If they are unable to change before the next emergency call because a second set of clothing is located at the ambulance's home base, and the ambulance does not return to base for prolonged periods, a violation of paragraph **(4)(c)(iii)** would exist.

If it is common practice that PPE is not utilized during certain situations or procedures where exposure to blood or OPIM is anticipated, then a violation of paragraph **(4)(c)(ii)** would exist. If inaccessibility of PPE exists, paragraph **(4)(c)(iii)** should also be cited.

h. *Can the employer's obligation to **launder PPE** be met by sending PPE home with employees to be laundered?*

No. It is the employer's responsibility not only to provide PPE, but also to clean, maintain, and/or dispose of it. Home laundering is not permitted because the employer cannot guarantee that proper handling or laundering procedures are being followed; it could also lead to the migration of contaminants to the home.

While many employees have traditionally provided and laundered their own uniforms or laboratory coats, if the item's intended function is to act as PPE, the employer must provide, clean, repair, replace, and/or dispose of it. If the employee wishes to choose, wear, and maintain his/her own uniform or laboratory coat, then he/she would need to don additional employer-handled and employer-controlled PPE when performing tasks where it is reasonable to anticipate exposure to blood or OPIM.

- i. *Does the requirement to **remove PPE** apply when moving from one work area to another?*

WAC 296-62-08001(4)(c)(vii) requires removal of all PPE prior to leaving the work area. While "work areas" must be determined based on the specifics of a particular case, a work area is generally considered to be an area where work involving occupational exposure occurs or where the contamination of surfaces may occur. The standard does not require employees to change PPE when traveling, for example, from one hospital laboratory area to another, provided the connecting hallway is also considered to be a work area.

A violation would exist, however, in the following example: An employee wearing contaminated gloves exits from a pathology laboratory to use a public telephone located in a public hallway of the hospital. Under such circumstances, it can be reasonably anticipated that another employee, without benefit of gloves or knowledge of the potential surface contamination, could use the phone and unwittingly become contaminated. The public telephone cannot be considered part of the "work area."

- j. *Does the use of **gloves** eliminate the need to meet for **handwashing**?*

No. As WAC 296-62-08001(4)(b)(v) indicates, handwashing is required after the removal of gloves or other personal protective equipment. Studies have shown that gloves provide a barrier, but that neither vinyl nor latex procedure gloves are completely impermeable. Thus, handwashing after glove removal is required

- k. *Must **disposable gloves** be removed immediately upon contamination?*

While disposable gloves must be replaced as soon as practical when contaminated, obviously some critical procedures (for example, surgery, delivery) cannot be interrupted to change gloves. The key words to evaluate are "practical" and "feasible."

- l. *Does **discoloration** of utility gloves require that they be discarded?*

Not necessarily. Certain solutions, such as iodine, may cause discoloration of gloves without affecting their integrity and function.

- m. *Are gloves required when administering **intramuscular or subcutaneous injections**?*

Gloves are usually not necessary when administering such injections as long as bleeding that could result in hand contact with blood or OPIM is not anticipated.

- n. *Are **plastic film food handling** gloves appropriate PPE?*
- No. Such "cafeteria" or "baggie" gloves are not appropriate for use in exposure-related tasks. They would not fit the employee as required by paragraph WAC 296-62-08001(4)(c)(3)(iii) of the standard.
- o. *Does the **phlebotomy** exemption apply to all such activity?*
- No. The exemption in WAC 296-62-08001(4)(c)(ix)(D) regarding use of gloves during phlebotomy procedures applies only to employees of volunteer donor blood collection centers, and does not apply to phlebotomy conducted in other settings such as plasmapheresis centers or hospitals.
- p. *Must the employer provide **prescription eyewear** for employees requiring eye and face protection?*
- No. The employer does not necessarily have to provide prescription eyewear for employees. Instead, he or she can provide and mandate the use of side shields, goggles, and/or protective face shields, and provide proper training in decontamination procedures.
- q. *Is eye protection required during **microsurgery**?*
- No. During microsurgery, when it is not reasonably anticipated that there would be any splattering, a surgeon is not required to wear eye protection while observing surgery through the microscope.
5. Housekeeping (WAC 296-62-08001(4)(d))
- This requirement to determine and implement an appropriate written schedule for cleaning applies to any "worksites" subject to the rule. This refers not only to permanent fixed facilities such as hospitals, dental/medical offices, clinics, etc., but also covers temporary non-fixed workplaces. Examples of such facilities include but are not limited to ambulances, bloodmobiles, temporary blood collection centers, and any other non-fixed worksites that have a reasonable possibility of becoming contaminated with blood or OPIM.
6. Environmental Contamination (WAC 296-62-08001(4)(d)(ii))
- This standard provides minimum cleaning and decontamination requirements for equipment and environmental and working surfaces that come into contact with blood or OPIM. This protects against potential disease transmission (for example, the CDC states that HBV can survive for at least one week in dried blood on environmental surfaces or contaminated needles and instruments).
- a. *What are "**appropriate disinfectants**" in the context of the work surface cleaning requirements?*
- "Appropriate disinfectants" as used in WAC 296-62-08001(4)(d)(ii)(A) include a diluted bleach solution, EPA-registered tuberculocidals (List B), sterilants (List A), or products registered against HIV/HBV (List D). The lists contain the primary registrants' products only. If the same formulation is renamed and distributed by other companies, these renamed products will not be on the lists, but their EPA Registration number must be on the label.

The lists are available from the National Antimicrobial Information Network at (800) 447-6349 or its web site at <http://ace.orst.edu/info/nain/lists.htm>.

List D includes primarily quaternary ammonia products that EPA has approved as effective against HIV and HBV. WISHA allows the use of these products provided the surfaces have not become contaminated with agents or volumes of or concentrations of agents for which higher level disinfection is recommended.

- b. *Must employers comply with **label instructions** when using disinfectants?*

Yes. In addition to the hazard communication considerations, the effectiveness of a disinfectant is governed by strict adherence to the instructions on the label. The employer must follow the label instructions regarding the amount of disinfectant and the length of time it must remain wet on the surface.

- c. *How can **bleach** be used properly in cleaning working surfaces?*

Fresh solutions of diluted household bleach (1:10 to 1:100 dilution) made up daily (every 24 hours) are also appropriate to disinfect environmental surfaces and to decontaminate sites following initial cleanup (for example, wiping up) of spills of blood or other potentially infectious materials. Contact time for bleach is generally considered to be the time it takes the product to air dry. Solutions of bleach should not be stored in glass containers, but in material such as the plastic in which the bleach, the consumer product, is packaged in. Household bleach (5.25 sodium hypochlorite) diluted to the appropriate strength for the clean up job at hand is also an effective disinfectant, although bleach may cause damage to some medical instruments and therefore cannot be used in all cases. In addition, gross contamination must be cleaned up first with a soap and water solution, to ensure the disinfectant is completely effective.

- d. *Must work surfaces be cleaned following each **individual step** in a series of analyses or a multi-step procedure?*

Not necessarily. Where procedures are performed on a continual basis throughout a shift or a day, as may be the case with a clinical laboratory technician performing blood analyses, it is not the agency's intent for the work surface to be decontaminated before the technician can proceed to the next analysis. Rather, the intention is for contaminated work surfaces to be decontaminated after the procedures are completed which, in the above example, would include a set of analyses. The completion of procedures might also occur when the employee is going to leave the work area for a period of time.

- e. *Must work surfaces be decontaminated after each **patient care procedure**?*

No. Decontamination is not automatically required after each patient care procedure, but is required only after procedures resulting in surface contamination.

- f. *Must the employer clean up **overt contamination and spills** immediately?*

As a general rule, immediate clean up is appropriate. However, there may be some instances in which immediate decontamination of overt contamination and spills may not be feasible as in, for example, an operating table during surgery.

- g. *Must work surfaces be decontaminated at the **end of the work shift**?*

The work surface decontamination must be performed at the end of the work shift *if* the work surface may have become contaminated since the last cleaning (for example, by setting down contaminated instruments or specimens on the work surface).

- h. *Must **all work surfaces** be decontaminated?*

No. This requirement is triggered by a *contaminated* work surface rather than work surface in a particular location. It does not, for example, encompass desks, countertops, *etc.* that remain uncontaminated.

- i. *Do **trash cans and other reusable containers** require the same level of decontamination?*

WAC 296-62-08001(4)(d)(ii)(C) requires both inspection and decontamination, on a regularly scheduled basis and upon visible contamination, of cans, bins, pails, and so forth which are intended for reuse. However, disinfection of these containers is not necessary to ensure their safety for their intended use. It is possible to achieve proper decontamination by means of a soap and water wash.

- j. *Can a **vacuum cleaner** be used to clean up contaminated broken glass (for example, capillary tubes, lab specimen dishes, phlebotomy tubes)?*

No. In addition, employees must be properly trained with respect to this task, and tools used in the cleanup must be properly decontaminated or discarded after use.

- k. *Does the prohibition against employees reaching into **containers with contaminated sharps** apply to sinks and other non-standard “containers”?*

Yes. The intent of WAC 296-62-08001(4)(d)(ii)(E) is to prevent situations in which the contents cannot be seen and safely handled. For example, employees must not reach into sinks filled with soapy water into which sharp instruments have been placed; appropriate controls in such a circumstance would include the use of strainer type baskets to hold the instruments and forceps to remove the items.

- l. *How is “**regulated waste**” distinguished from non-regulated material such as bloodstains?*

WAC 296-62-08001(4)(d)(iii) focuses on regulated waste, as defined by the standard. In determining whether these requirements apply, WISHA does not use the actual volume of blood as the determining factor as to whether a particular material is to be considered regulated waste. For example, 10 ml of blood on a disposable bed sheet would appear as a spot (not regulated waste), while the same amount of blood on a cotton ball would likely cause saturation and dripping (regulated waste). Similarly, an item may adequately contain these materials when in a static state yet liberate them when compacted in the waste container.

WISHA does not generally consider discarded feminine hygiene products, used to absorb menstrual flow, to fall within the definition of regulated waste (although in certain cases the nature of the exposure may require compliance with the full requirements of the Bloodborne Pathogens Standard). The intended function of such products is to absorb and contain blood. Appropriate steps must be taken for the proper handling and disposal of these items, however.

The potential for the generation of bulk blood (for example, through dripping or flaking off of material that may contain either blood or OPIM) should be considered. Under no circumstances should waste be squeezed or shaken to determine this. The Compliance Officer must exercise professional judgment to make a determination based on visual factors such as a pool of liquid in the bottom of the container or dried blood flaking or falling off during handling, or based on employee interviews.

- m. *How does WISHA determine if a **used needle** is in fact contaminated?*

Lacking information to the contrary, WISHA considers any used needle to be contaminated and to require appropriate handling under the requirements of WAC 296-62-08001(4)(d)(iii).

- n. *What must a **sharps container** be made of in order to be puncture-resistant and leakproof?*

WAC 296-62-08001(4)(d)(iii)(A)(I) provides four criteria, two of which (labeling/color coding and closable) are easily discerned. Sharps containers are made from a variety of products, from cardboard to plastic. As long as they are leakproof on the sides and bottom and are puncture resistant, they are acceptable no matter the composition. The manufacturer can provide additional guidance, as can the NIOSH publication, "Selecting, Evaluating and Using Sharps Disposal Containers", DHHS (NIOSH) Publication Number 97-111, January 1998 at <http://www.cdc.gov/niosh/sharps1.html>.

If a sharps container considered puncture resistant by the manufacturer is in fact allowing sharps to protrude through the container, it must be replaced or a violation of WAC 296-62-08001(4)(d)(iii)(A)(I) exists.

- o. *Can **sharps containers with unwinders** be used to separate needles from reusable syringes or vacutainer holders?*

The sharps container should not create additional hazards. Some sharps containers have unwinders that are used to separate needles from reusable syringes or from reusable vacutainer holders. The design of the sharps container and the location of the unwinder must allow the needle removal to be accomplished in a safe, one-handed manner. If this situation exists, it is necessary to determine if the circumstances warrant needle removal. WAC 296-62-08001(4)(b)(vii)(A) prohibits needle removal unless no alternative is feasible or it is required by a specific medical procedure. These conditions must be met even if a sharps container with an unwinder is used.

- p. *Is the needle sheath or syringe barrel a “waste container” as required by the standard?*

No. The needle sheath or syringe barrel is a temporary measure that does not substitute for a sharps container.

- q. *Can **duct tape** be used to secure a sharps container lid?*

Yes. But duct tape cannot substitute for the lid itself.

- r. *Are there situations where sharps containers do not need to be in the **immediate area**?*

WAC 296-62-08001(4)(d)(iii)(A)(II)(aa) requires the sharps container to be located as close as feasible to the area where sharps are used or can reasonably be expected to be found. In most cases, that requires the containers themselves to be in the immediate area. Work areas such as correctional facilities, psychiatric units, pediatric units or residential homes may have difficulty placing containers in the immediate use area. Alternatives include using containers that are lockable or designed to prevent removal of syringes while maintaining easy access for discarding. Containers may also be locked onto a mobile cart if healthcare workers in these units use one, or they may be brought to the site and removed by the employee upon leaving.

- s. *Are there settings other than patient care or direct contact that require sharps containers?*

Yes. Laundries, for example, generally require sharps containers due to the risk of needles being mixed with laundry. Facilities that handle shipments of waste that may contain contaminated sharps also require sharps containers in the event a package accidentally opens and releases sharps.

- t. *Are there particular risks related to **overfilling sharps containers**?*

Yes. Employers must ensure that containers are checked and replaced regularly to prevent overfilling. The Exposure Prevention Information Network (EPINet) study Uniform Needlestick and Sharp Object Injury Report (77 Hospitals, 1993-1995) reports that 717 injuries occurred in this time period when an employee was putting an item into a disposal container. Additional information on sharps disposal containers is available in the NIOSH publication mentioned above and listed in the reference section.

- u. *How can an employer ensure that **regulated waste** has been successfully **decontaminated** (eliminating the need for labeling or color-coding)?*

The employer's exposure control plan must indicate the decontamination method. In order to ensure that decontamination is successful, the employer must monitor factors such as the content, volume, density, configuration, and organic content of the load of waste. The temperature needed for incineration is sufficient to decontaminate regulated waste. Autoclave efficiency can be verified by means of biological or chemical indicators. While most disposal bags used will contain an indicative color strip, if this is not the case a review may be made of the documentation kept for the sterilizer.

Such documentation should include

- date, time, and operator of each run,
- type and approximate amount of waste tracked,
- post-treatment reading of temperature-sensitive tape,
- dates and results of calibration of the sterilizer, and
- results of routine spore testing.

v. *Is **double-bagging** routinely required?*

No. A second container is required only when outside contamination of the first waste container occurs (WAC 296-62-08001(4)(d)(iii)(B)(II)). This would include such circumstances as a waste container being splashed with blood during surgery or autopsy, when an employee with bloody gloves has handled a container, or when a waste bag leaks blood or OPIM onto an adjacent bag.

E. HIV and HBV Research Labs and Production Facilities (WAC 296-62-08001(5))

This section includes additional requirements that must be met by research laboratories and production facilities engaged in the culture, production, concentration, and manipulation of HIV and HBV.

Laboratories that conduct research on blood and other body fluids unrelated to HIV or HBV, or that use unconcentrated blood or blood components as the source of HIV or HBV, are not considered research laboratories for the purpose of this standard.

1. *How must a covered laboratory comply with the “**other physical-containment device**” requirement?*

WAC 296-62-08001(5)(b)(ii)(E) provides an option to biological safety cabinets in the form of “other physical containment devices.” To meet the requirement, it must be sufficient to ensure that virus-containing material will be kept away from the worker's mucous membranes, unprotected skin, and breathing zone.

2. *How must a covered laboratory **document basic compliance** with the requirements of this standard?*

WAC 296-62-08001(5)(b)(ii)(M) requires a “biosafety manual” to be developed and updated at least annually. This represents an enforceable program requirement (in addition to the specific requirements found elsewhere in the standard).

3. *How must a **Biological Safety Cabinet** be certified?*

If the laboratory employer has chosen to rely upon a Biological Safety Cabinet (BSC), a dated tag should be affixed to the BSC indicating who performed the initial and/or annual certification. Alternatively, a certification report attesting to a minimum inward face velocity of at least 75 linear feet per minute and the integrity of the HEPA filters must be dated and signed by the trained technician performing the measurements and integrity tests.

4. What constitutes a sufficient **handwashing** facility?

The handwashing facilities required by WAC 296-62-08001(5)(c)(i) must be supplied with at least tepid water, soap, and hand towels.

5. What constitutes a **sufficient** eyewash facility?

As described in WAC 296-62-130, an eyewash (required in covered laboratories by WAC 296-62-08001(5)(d)(iii)) must supply a sufficient quantity of water to completely flush both eyes. A 15-minute supply of continuous free-flowing water is acceptable. The hands must be free to hold the eyelids open to aid in the complete flushing of the eyes. Portable facilities are acceptable only if they meet these requirements.

F. Hepatitis B Vaccination and Post Exposure Evaluation and Follow Up (WAC 296-62-08001(6)).

This section requires employers to make the hepatitis B vaccination available to employees with occupational exposure to blood or OPIM. It also ensures that employees receive appropriate medical follow-up after each specific exposure incident.

1. *Must **employees participate** in vaccination and follow-up programs?*

No. While it is WISHA's intent to have the employer remove, as much as possible, obstacles to the employee's acceptance of the vaccine, the phrase "made available" emphasizes that the employee has the option to decline participation in the vaccination and follow-up programs.

2. *Are there **exemptions** for Hepatitis B Vaccine?*

Yes. The circumstances under which an employer is exempted from making the vaccination available include: (a) the complete hepatitis B vaccination series was previously received (three vaccines or in the case of a non-responder, six); (b) antibody testing shows the employee to be immune; or (c) the vaccine cannot be given for medical reasons, the series does not have to be made available. If the employer claims one of these exemptions, it must be documented in the employee's medical record in accordance with paragraph **(8)(a)(ii)(B)**.

3. *Can employers permit or **require employees to use health insurance** to cover the cost of the required vaccination and follow-up programs?*

WAC 296-62-08001(6)(a)(ii)(A) requires that the vaccination and follow-up be made available "at no cost to the employee." The employer must not permit the employee to use his or her healthcare insurance to pay for the series unless the employer pays all of the cost of the health insurance *and* there is no cost to the employee in the form of deductibles, co-payments, or other expenses. Even partial employee contribution to the insurance premium means the employee could be affected by a rise in the total premium caused by insurance company reaction to widespread hepatitis B vaccinations and is therefore unacceptable. Likewise, any use of a spouse or other family member's insurance plan to provide vaccination would not be considered "at no cost" to the employee.

Workers' compensation in Washington covers the cost of post-exposure testing for the injured worker, post-exposure prophylaxis (PEP), follow-up testing as determined by the health care professional, and time loss associated with the exposure incident. More information on this policy can be found at <http://www.wa.gov/lni/omd/policy/polohiv.htm>

4. *Can the employer **require the employee to pay the original cost of the vaccine** and then reimburse the employee if he or she remains employed for a specified period of time?*

No, nor can the employer use an “amortization contract” that requires employees to reimburse the employer for the cost of the vaccination should they leave his/her employ prior to a specified period of time is similarly prohibited. Either option would not provide the vaccination and follow-up “at no cost to the employee.”

5. *Does the employer have to make the vaccination and follow-up available during **normal work hours**?*

Yes. The phrase “reasonable time and place” in WAC 296-62-08001(6)(a)(ii)(B) requires that they be offered at the employee’s convenience, and normally scheduled work hours ensures that the employee is not inconvenienced. Any costs of travel must be borne by the employer.

6. *Must a **physician** provide the vaccination and follow-up?*

No. The standard clearly allows other licensed health care professionals, operating within their license, to carry out some or all of the provisions of this rule. This includes physician assistants (PAs), advanced registered nurse practitioners (ARNPs), and many other registered nurses (RNs) with appropriate training and expertise.

If there is a question as to whether the employer's choice of healthcare provider complies with the standard, staff can contact the Occupational Health Nurse in WISHA Policy and Technical Services or the Washington State Nursing Care Quality Assurance Commission at (360) 236-4725.

7. *What are the **current USPHS recommendations** regarding **Hepatitis B Vaccination**?*

The Centers for Disease Control is the U.S. Public Health Service (USPHS) agency responsible for issuing guidelines and making recommendations regarding infectious agents, including those referenced in WAC 296-62-08001(6)(a)(ii)(D). Copies of the current guidelines and other CDC documents can be obtained on CDC’s web site, <http://www.cdc.gov>. The hepatitis B vaccination must be given in the standard dose and through the standard route of administration as recommended in the USPHS/CDC guidelines.

The most current CDC guideline regarding Hepatitis B is *Morbidity and Mortality Weekly Report*, "Immunization of Health-Care Workers. Recommendations of the Advisory Committee on Immunization Practices (APIC) and the Hospital Infection Control Practices Advisory Committee (HICPAC)." December 26, 1997, Vol.46, No.RR-18 (See Appendices for web address). It recommends that employees who have ongoing contact with patients or blood and are at ongoing risk for injuries with sharp instruments or needlesticks be tested for antibody to Hepatitis B surface antigen, one to two months after the completion of the three-dose vaccination series. Employees who do not respond to the primary vaccination series must be re-vaccinated with a second three-dose vaccine series and re-tested. Non-responders must be medically evaluated.

Note: More information can also be obtained from a "Frequently Asked Questions for Hepatitis B Vaccine" document on the web at <http://www.lni.wa.gov/wisha/p-ts/BBPathogens/>.

8. *How must an **interrupted Hepatitis B vaccination schedule** be handled to be consistent with CDC guidelines?*

If one or two shots have been given and time has lapsed beyond the recommended schedule, the series should be continued - not restarted - at any time even up to several years after the series was initiated. It is not known how long a period of time this interruption can be considered part of the initial series.

If the series can not be documented as ever having been given, a titer can be checked or the full series may be repeated.

If a low titer is found in subsequent years after a documented positive response, the individual does not require a booster to be given.

In any case, employees must not be asked to pay for the vaccine or titers - whether or not the vaccine series is interrupted, unless the standard does not actually apply to their particular work activity.

9. *Must the employer continue to make **vaccination and follow-up** available after the employee has left his or her employment?*

No. Initial doses of the HBV vaccine must be offered to seasonal employees (lifeguards in summer, ski patrol in winter) who may not be employed long enough for the full series. Once the hazard is no longer present because employment has ended, the employer is not responsible for continuing the series. If workers resume the same type of work at a later time, they should finish the series at that time. Most individuals will have immunity after 2 shots in the series, but will gain longer lasting protection with the full series of 3 shots regardless of when it is given.

10. *How can the employer demonstrate that **an accredited laboratory** conducted all tests?*

The employer must ensure that laboratory tests are conducted by an accredited laboratory at no cost to the employee. He or she can document this by a certificate showing the lab is accredited by a national accrediting body (American Association of Blood Labs, College of American Pathologists, Joint Commission on Accreditation of Healthcare Organizations, etc) or the Washington State Department of Health, which participates in a recognized quality assurance program.

11. *What is included in the requirement that the **Hepatitis B vaccination** must “be made available” to employees within 10 working days of initial assignment?*

The phrase "made available" includes the healthcare professional's evaluation and arranging for the administration of the first dose of the hepatitis B vaccination series to begin within the 10 days.

12. *Are all employees with occupational exposure covered by the requirement for Hepatitis B Vaccine, no matter how **infrequent the exposure** is?*

Yes. This includes all employees with occupational exposure, regardless of how often the exposure may occur. Part-time and temporary employees are included in this coverage. The vaccine does not have to be made available if the employer documents the exemption(s) set forth in paragraph (6)(b). It also does not have to be administered if the employer can produce the signature of the employee on the mandatory declination form (WAC 296-62-08050, Appendix A).

13. *Must employers offer the pre-exposure hepatitis B vaccine to all **First Aid trained employees**?*

No. The department does not consider voluntary acts by first-aid trained individuals who are not expected to provide first aid as part of their job duties to represent “occupational exposure” under the standard.

In the case of individuals who are assigned to provide first aid as a primary job duty, the requirements for pre-exposure vaccinations apply.

In the case of individuals who are assigned to provide first aid, but only as a collateral duty, any violation of the requirement to offer pre-exposure hepatitis B vaccine to employees will be considered *de minimis* and therefore not cited provided the following circumstances apply:

- The primary job assignment of such a designated first aid provider is not the rendering of first aid or other medical assistance;
- Any first aid rendered by such person is rendered **only as a collateral duty**, responding solely to injuries resulting from workplace incidents, generally at the location where the incident occurred;

- The employer's exposure control plan specifically addresses the provision of the hepatitis B vaccine to all unvaccinated first aid providers who render assistance in any situation involving the presence of blood or OPIM (regardless of whether an actual "exposure incident" as defined by the standard occurred) and the provision of appropriate post-exposure evaluation, prophylaxis, and follow-up for those employees who experience an "exposure incident." The plan must include and the employer must effectively implement the following:
 - ✓ Provision for a reporting procedure that ensures that **all** first aid incidents involving the presence of blood or OPIM will be reported to the employer before the end of the work shift during which the incident occurred. The report must include the names of all first aid providers who rendered assistance, regardless of whether personal protective equipment was used and must describe the first aid incident, including time and date. The description must include a determination of whether or not, in addition to the presence of blood or other potentially infectious materials, an "exposure incident," as defined by the standard, occurred.
 - ✓ A report that lists all such first-aid incidents that is readily available, upon request, to all employees and to L&I.
 - ✓ Provision to include the reporting procedure in the bloodborne pathogens training program for designated first-aiders.
 - ✓ Provision for the full hepatitis B vaccination series to be made available as soon as possible, but in no event later than 24 hours, to all unvaccinated first aid providers who have rendered assistance in any situation involving the presence of blood or OPIM, regardless of whether or not a specific "exposure incident," as defined by the standard, has occurred.

14. *Can the employer alter the **declination form** in Appendix A of the standard?*

Although the declination form set forth in WAC 296-62-08050, Appendix A, is mandatory, it does not have to be reproduced. The declination statement used by the employer must contain the same language as that found in Appendix A of the standard - no words may be added or subtracted. Oral or written translation must be made available for those unable to understand English.

15. *Can the employer require the use of **consent forms** for the purpose of the vaccine or post-exposure testing?*

The standard does not make reference to consent forms. Informed consent forms, when they are a part of the healthcare professional's standard medical practice, are acceptable. However, any waiver of liability violates WAC 296-62-08001(6)(a)(ii)(A), which requires that the vaccine be provided at no cost. Consent forms that require the employee to release his or her test results to the employer violate the confidentiality requirements in WAC 296-62-08001(6)(e)(iii). Consent forms used by the employer for training or documentation purposes would violate paragraph WAC 296-62-08001(7)(b)(vii)(I) if the hazards of the vaccine are clearly exaggerated and potentially misrepresented.

17. *Are vaccine boosters required?*

At the time of this publication, the provision of routine boosters of the hepatitis B vaccine is still being assessed. There is no requirement to provide boosters if after a normal antibody response has been elicited, an antibody titer is later found to be low, unless the USPHS recommends it at a later date.

18. *Are post-exposure evaluation and follow-up procedures required for exposure incidents other than HIV and HBV?*

Yes. The requirement for post-exposure evaluation and follow-up in WAC 296-62-08001(6)(c) is not specific to HIV and HBV but instead applies to any exposure incident involving bloodborne pathogens or other potentially infectious materials. This includes the specific requirement in (6)(c)(iv) for post-exposure prophylaxis as recommended by the CDC. The current CDC recommendation for HCV is found in Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Disease, October 16, 1998/Vol. 47/No. RR-19 (See Appendices for web address).

In addition, the most current HIV post-exposure follow-up recommendations for an exposure incident are found in the CDC Morbidity and Mortality Weekly Report: "Public Health Service Guidelines for the Management of Health-Care Worker Exposures to HIV and Recommendations for Post-exposure Prophylaxis," May 15, 1998/Vol. 47/ No. RR-7 (See Appendices for web address). HIV Post-Exposure Prophylaxis (PEP), should begin within 2 hours of exposure or as soon as possible.

NOTE: Resources for information regarding appropriate post-exposure follow-up:

- Information for Health Care Providers on PEP: National Clinicians' Post-exposure Prophylaxis Hotline (PEP-Line): (888) 448-4911.
- CDC National Center for Infectious Disease – Hospital Infections Program <http://www.cdc.gov/ncidod/hip/>
- Harborview Medical Center: Infectious Disease Program/PEP Clinic - Resource for Health Care Providers:(206) 751-5100.

19. *Are employers required to provide post-exposure follow-up to **employees who fall outside the scope** of the standard?*

No. Employees who do not fall within the scope of this standard may still experience a specific exposure incident at work that is unrelated to the performance of their job duties. An example is "Good Samaritan" first-aid assistance, voluntarily performed, to an injured co-worker or a member of the public. In such a case, WISHA strongly encourages employers of these employees to voluntarily offer them the follow-up procedures set forth in this paragraph. Workers' compensation may still cover these employees for the cost of post-exposure follow-up even if the WISHA requirements do not.

20. *Is **confidentiality of medical records** arising out of pre-exposure or post-exposure medical evaluations still required if the employer and the health care provider are the same organization?*

Yes. The boundary between employer and healthcare professional may be blurred in a medical setting in which, for example, the healthcare provider is both the employer and the evaluating healthcare professional or where the employer's certified medical laboratory analyzes the serological samples. However, the confidentiality requirements remain in place. In such cases, the employer must ensure that requirements for consent and confidentiality have been followed. The medical information must be confined to the medical department and not to be discussed with or revealed to others (for example, the personnel department, supervisors, or other healthcare professionals who do not need the information).

21. *How does WISHA evaluate the need for providing post-exposure evaluation and follow-up **immediately**?*

The word "immediately" is used in WAC 296-62-08001(6)(c) to emphasize the importance of prompt medical evaluation and prophylaxis. An exact time is not given in the standard because the time limit on the effectiveness of post-exposure prophylactic measures can vary depending on the infection of concern. WISHA requires the post-exposure evaluation and follow-up to be given as soon as possible after exposure. Where medical practice is an issue, the occupational health nurse in WISHA Policy and Technical Services will be consulted if necessary.

22. *What **documentation of exposure incidents** does WISHA expect to see?*

Following an exposure incident, such as a needlestick or other sharps injury, WAC 296-62-08001(6)(c)(i) requires employers to document, at a minimum, "the route(s) of exposure, and the circumstances under which the exposure incident occurred." This documentation of circumstances surrounding an incident allows identification and correction of hazards. To be complete, this documentation must contain sufficient detail about the incident, including the following:

- engineering controls in use at the time,
- work practices followed,
- a description of the device in use,
- protective equipment or clothing that was used at the time of the exposure incident,
- location,
- procedure being performed when the incident occurred, and
- the employee's training.

Additional information might also include a comparison of similar occurrences and recommendations to avoid future incidents, although this information is not mandatory. One resource that is available for collecting information on exposures from needles and other sharp devices is a report form developed by the Exposure Prevention Information Network (EPINet). It provides a standardized methods for recording percutaneous injuries and blood and body fluid contacts, in order to assist hospitals in complying with the OSHA recordkeeping requirements of the December 1991 Bloodborne Pathogens Standard. Hospitals can use the EPINet system to compare and share information and identify successful prevention measures. The EPINet system includes a Uniform Needlestick and Sharp Object Injury Report and a Uniform Blood and Body Fluid Exposure Report, as well as software for entering, accessing, and analyzing the data from the forms. To find out more about this program contact EPINet at (800) 528.9803 or on the Internet at: <http://www.med.virginia.edu/medcntr/centers/epinet/subpage2.html>

23. *Does the employer have a right to the **source individual's test results**?*

No. WAC 296-62-08001(6)(c)(ii)(C) does not authorize the employer to be informed of the results of source individual or exposed employee testing. However, the results of the source individual's testing must be made available to the exposed employee to the extent allowed by applicable state and federal laws and regulations concerning medical privacy and confidentiality. In the event that the source individual refuses to give consent for testing, the local health officer must be contacted within 7 days of the exposure in order to proceed with legal interventions. If warranted, the local health officer can obtain an order for testing to be done.

G. Employee Information and Training (WAC 296-62-08001(7))

This subsection ensures that employees receive sufficient information and warning through labels, signs, information and training.

1. *Do the **labeling requirements** preempt other labeling requirements?*

No. The labeling requirements do not preempt either the U.S. Postal Service labeling requirements (39 CFR Part III) or the United States Department of Transportation's (USDOT) Hazardous Materials Regulations (49 CFR Parts 171-180).

USDOT labeling is required on some transport containers (those containing "known infectious substances"). It is not required on all containers for which 29 CFR 1910.1030 requires the biohazard label. Where there is an overlap between the WISHA-mandated label and the USDOT-required label, the USDOT label will be considered acceptable on the outside of the transport container, provided that the WISHA-mandated label appears on any internal containers that may be present. Containers serving as collection receptacles within a facility must bear the WISHA-mandated label since these are not covered by the USDOT requirements.

2. *What bloodborne pathogens should be addressed as part of **training**?*

WAC 296-62-08001(7)(b)(B), (C) and (D) require that HIV and HBV and other bloodborne diseases be described as part of the training. The employer must convey the idea that a number of bloodborne diseases other than HIV and HBV exist, such as Hepatitis C (HCV) and syphilis. At the same time, the employer need not cover such uncommon diseases as Creutzfeldt-Jakob disease unless it is appropriate, for example, for employees working in a research facility with that particular virus. Training programs must also incorporate current protocols for follow-up evaluation and treatment options for HIV, such as Post-Exposure Prophylaxis (PEP), and for HCV.

HCV is the most common chronic bloodborne infection in the United States. Persons who are chronically infected with HCV may not be aware of their infection because they may not be clinically ill. The infection may lead to chronic liver disease that develops slowly, often taking two or more decades before it is recognized. It is important that training include information on the transmission and symptoms of HCV.

3. *How should the **limitations of controls** be addressed in the training?*

WAC 296-96-08001(7)(b)(vii)(F) requires that training explain the use and limitations of methods that will prevent or reduce exposure, including appropriate engineering controls, work practices, and personal protective equipment.

This requirement is very important, because the development of safer engineering controls introduces a variety of new techniques and practices to the work environment. Manufacturers market passive safety features, active devices, integrated safety designs, and accessory safety devices. The Record Summary respondents “repeatedly” emphasized the necessity of effective training and education whenever new engineering controls are implemented. Training must include instruction in any new techniques and practices. “Hands-on” training is particularly useful. Employee participation in the selection of new devices, which plays a major part in their acceptance and correct use, is encouraged.

4. *Do the “**emergency**” training requirements apply to employees whose regular job duties require them to handle emergencies?*

The word “emergency” in this paragraph refers to blood or OPIM exposure outside the normal scope of work. It does not refer to hospital emergency rooms or emergency medical technicians’ work.

5. *Does the requirement for **interaction** mean that a live subject matter specialist must actively provide the training?*

WAC 296-08001(7)(b)(vii)(N) requires that there be an opportunity for *interactive* questions and answers with the person conducting the training session. During training, it is critical that trainees have an opportunity to ask and receive answers to questions where material is unfamiliar to them. Frequently, a trainee may be unable to go further with the training or to understand related training content until a response is received.

Trainees must have direct access to a qualified trainer during training. WISHA's requirement can be met if trainees have direct access to a trainer by way of a telephone hot line that can achieve an immediate response. The use of an electronic mail system to answer employee questions is not considered direct access to a qualified trainer, unless the trainer is available to answer e-mailed questions at the time the questions arise.

Training the employees solely by means of a film or video without the opportunity for a discussion period would constitute a violation of this paragraph. Similarly, a generic computer program, even an interactive one, is not considered appropriate unless the employer supplements such training with the site-specific information required (for example, the location of the exposure control plan and the procedures to be followed if an exposure incident occurs) and a person is accessible for interaction.

6. *What are “**standard microbiological practices**” as used in describing the additional training requirements for HIV/HBV laboratories?*

"Standard microbiological practices" as used in WAC 296-08001(7)(b)(ix)(A), (B) and (C) refer to procedures comparable to those outlined in "Biosafety in Microbiological and Biomedical Laboratories", Publication No. (NIH) 88-8395, May 1988). The requirement that "proficiency" be demonstrated before assignment to covered jobs means experienced laboratory workers may not need to be retrained. Education such as a graduate degree in the study of viral diseases, or another closely related subject area with a period of related laboratory research experience, could constitute "proficiency". The employer is responsible for evaluating the employee's proficiency and for documenting the mechanism used in such evaluations.

H. Recordkeeping (WAC 296-62-08001(8))

Training records must be kept for each employee covered by this standard, as well as records for medical evaluations, treatment, and surveillance.

1. *Must the employer maintain **medical records** within the business premises?*

No. Medical records required by WAC 296-62-08001(8)(a) will be of particular importance to the health care professional in determining vaccination status and courses of treatment to follow in the event of an exposure incident. Although the employer is required to establish and maintain medical records, he or she may contract for the services of a health care professional located off-site and that person or company may retain the records.

2. *What responsibility for recordkeeping does an employer have if he or she **contracts with a third party**?*

If the employer has contracted with a responsible third party to maintain the required records, the employer is only guilty of a violation in relation to deficiencies, of which she or he knew or would have known, with the exercise of reasonable diligence.

I. Application of Other Standards to Bloodborne Pathogen Hazards

1. Does the hazard communication standard apply to bloodborne pathogens?

No. The Hazard Communication standard applies only to the hazards of chemicals in the workplace and does not apply to biological hazards such as bloodborne diseases.

2. How do the employee medical records requirements apply to bloodborne pathogens?

Records concerning employee exposure to bloodborne pathogens and records about HIV and/or HBV status are considered employee medical records within the meaning of Part B of Chapter 296-62 WAC.

3. Does the respiratory protection standard apply to bloodborne pathogens?

Generally, the respiratory protection standard does not apply to bloodborne pathogens because respirators are not appropriate control measures for bloodborne exposures. However, placing or storing respirators in areas where they could be contaminated by body fluids constitutes a violation of WAC 296-62-071.

*4. Do the **hazardous waste cleanup and emergency response standards** apply to bloodborne pathogens?*

The Hazardous Waste Standard (Part P of Chapter 296-62 WAC) covers workers at uncontrolled hazardous waste remediation sites, workers at Resource Conservation and Recovery Act (RCRA) permitted hazardous waste treatment, and workers at storage and disposal facilities.

The Emergency Response to Hazardous Substances Release Standard (Part R of Chapter 296-62 WAC) applies to those workers expected to respond to emergencies caused by the uncontrolled release of a hazardous substance.

Because the definition of hazardous substance includes any biological agent or infectious material which may cause disease or death. There are potential scenarios where the bloodborne and hazardous waste standards (Parts P and R) may overlap, including the following:

- Workers involved in cleanup operations at hazardous waste sites involving infectious waste;
- Workers responding to an emergency caused by the uncontrolled release of infectious material; for example, a transportation accident;
- Workers at RCRA-permitted incinerators that burn infectious waste; and
- Workers at biomedical waste treatment facilities.

In such situations, employers must comply with the applicable requirements of all three standards. If there is a conflict between standards, the standard most protective of the employee's health and safety will govern.

IV. Special Enforcement and Consultation Protocols

As a general rule, WISHA enforcement and consultation activities related to bloodborne pathogens will reflect the requirements of the standard and the interpretive guidance in Section III above. Employers in industries with a high risk for bloodborne pathogens exposure, such as health care employers, should be considered to be “high hazard” employers for the purposes of assigning consultation priorities. Such inspections and consultations will be conducted in accordance with all applicable policy guidance in the WISHA Compliance Manual and elsewhere. This section, as well as section VI below, supplement and adjust that guidance where necessary.

A. *How should inspections and consultations of employers subject to the bloodborne pathogens standard be conducted?*

All comprehensive consultations and inspections, whether programmed or unprogrammed, of employers with employees who have occupational exposure to bloodborne pathogens or other potentially infectious materials, should include a review of the employer’s exposure control plan and employee interviews to assess the employer’s basic compliance with the standard.

Based on exceptional circumstances, a WISHA consultation or enforcement supervisor may choose to limit the scope of an inspection and omit the bloodborne pathogens evaluation described above.

B. *When should the basic review of bloodborne pathogens compliance be expanded to include other issues related to occupational exposure to blood?*

Inspections and consultations should be expanded to include a greater focus on bloodborne pathogens in the following situations:

- *Compliance Deficiencies.* When an initial review of the exposure control plan or employee interviews indicate deficiencies in complying with WISHA bloodborne pathogens requirements.
- *Employee Complaints.* When relevant employee complaints or comments are received during employee interviews that specifically relate to occupational exposure to blood or OPIM.
- *Fatality/catastrophe Inspection.* When a fatality/catastrophe inspection is conducted as the result of occupational exposure to blood or OPIM.
- *Employer Request.* When the employer specifically requests an in-depth review and such a review appears to be an appropriate use of WISHA consultation resources.

C. *How should IMIS compliance and consultation forms be coded?*

Compliance forms: Current instructions for completing the appropriate inspection classification boxes on the WISHA-1, Inspection Report, as found in the IMIS Compliance Forms Manual, are expected to be applied when recording bloodborne pathogens inspection.

The following code should be used: **N 02 Blood.**

Consultation forms: Current instructions for completing the appropriate consultation classification boxes on the WISHA-30, Consultation Visit Form, as found in the IMIS Consultation Forms Manual, are expected to be applied when recording bloodborne pathogens inspection.

The following code should be used: **N 02 Blood.**

V. Conducting In-depth Bloodborne Pathogen Inspections and Consultations

In evaluating an employer's compliance with the bloodborne pathogens standard in detail, both enforcement and consultation staff should be guided by the following, as well as any other applicable policy guidance.

A. Inspection Procedures

a. *Who should participate in the opening conference?*

Where appropriate, the facility administrator, as well as the directors of infection control, employee (occupational) health, training and education, and environmental services (housekeeping) will be included in the opening conference or interviewed early in the inspection or consultation. Employee representatives must also be present, according to WAC 296-27-16003(2), *Recordkeeping and Reporting, Inspection Format* and the Compliance Manual chapter II section C.

b. *What data should be considered as the review begins?*

In addition to the bloodborne pathogens program itself and any employee interviews conducted during the initial review, WISHA staff should review the facility's file of incident reports or first-aid log of injuries (for example, needlesticks) documenting the circumstances of exposure incidents in accordance with the provisions in the exposure control plan and the post-exposure follow-up procedures (Section F, no.21 above).

c. *What precautions should WISHA staff take to protect themselves from exposure?*

WISHA staff must take necessary precautions to avoid direct contact with body fluids and must not participate in activities that will require them to come into contact with body fluids, needles or other sharp instruments contaminated with blood. To evaluate such activities, WISHA staff normally must establish the existence of hazards and adequacy of work practices through employee interviews and must observe them at a safe distance.

d. *How should WISHA staff identify the need for personal protective equipment?*

On occasions when entry into potentially hazardous areas is judged necessary, WISHA staff must be properly equipped as required by the facility as well as by his/her own professional judgment, after consultation with the employee's supervisor, and in accordance with any applicable direction from the L&I internal safety and health program.

e. *How should WISHA Staff handle activities in patient care areas?*

WISHA staff must use appropriate caution and discretion when entering patient care areas of the facility. When such visits are judged necessary for determining actual conditions in the facility, the privacy of patients must be respected. Photographs of patients normally will not be necessary and in no event may identifiable photographs be taken without their consent.

B. Engineering Controls

a. *How should WISHA consultation and enforcement staff evaluate possible violations of the exposure control plan as it relates to engineering controls?*

Upon reviewing the facility's written exposure control plan, WISHA staff are expected to address any engineering control-related violations in accordance with the following guidelines:

1. If the plan does not exist – or cannot be identified as a cohesive entity - a violation of WAC 296-62-08001(3)(a)(i) should be cited and classified in accordance with existing policies regarding program violations (which would require that the violation be cited as a separate serious violation in the event that related serious violations were identified during the inspection)
2. If the plan exists but has not been evaluated in the past 12 months, a violation of WAC 296-62-08001(3)(a)(iv) should be cited and classified in accordance with existing policies regarding program violations. If the plan does not reflect the need for appropriate engineering and work practice controls, a violation of WAC 296-62-08001(3)(a)(ii) should also be cited, but it should be grouped with the violation of WAC 296-62-08001(3)(a)(iv).
3. If the plan exists and has been evaluated in the past 12 months, but it does *not* reflect the need for the use of appropriate, available and effective engineering controls, a violation of WAC 296-62-08001(3)(a)(ii) should be cited and classified in accordance with existing policies regarding program violations.
4. If the plan exists, has been evaluated in the past 12 months, and reflects the need for appropriate use of engineering controls and work practices, and the other requirements of WAC 296-62-08001(3)(a) have been met, no violation of WAC 296-62-08001(3)(a) should be cited. If the plan has not been implemented, any specific failures should be cited in accordance with the guidance below.

b. *How should WISHA consultation and enforcement staff evaluate the use of engineering and work practice controls in accordance with WAC 296-62-08001(4)?*

1. WISHA consultants and inspectors evaluating an employer's compliance with the engineering controls requirements of WAC 296-62-08001(4) should take the following steps.
 - WISHA staff should determine through interviews and/or observation of work involving exposure to blood or OPIM whether sufficient engineering controls and work practices are used.

- While it is generally accepted that an exposure incident can occur at any time or place, a review of the facility records can better direct the consultant or inspector to areas that are more likely to be sites of exposure incidents. WISHA staff should determine if multiple injuries have resulted during the same procedure, using the same equipment, in the same location or among similar employees (for example, housekeepers) and determine whether engineering or work practices have been implemented to prevent or minimize future injuries.

Data from The Uniform Needlestick and Sharp Object Injury Report, 77 Hospitals, 1993-1995, Exposure Prevention Information Network (EPINet) at <http://www.med.virginia.edu/~epinet/soio.html> show that injuries occurred, in order of frequency, in patient rooms, operating rooms, emergency departments, and intensive/critical care units. The report indicates that nurses (RNs and LPNs) were injured more often than any other type of healthcare worker. Furthermore, the report finds that an overwhelming majority (93%) of the injuries was caused by items that were not a “safe design with a shielded, recessed, or retractable needle.”

- WISHA staff also should investigate whether the employer has instituted alternative engineering controls and work practices to eliminate or minimize employee exposure in areas where exposure incidents have been documented – or where exposure to such injuries typically occurs.

WISHA consultants and inspectors should carefully evaluate the exposure control measures, such as effective engineering controls, used at the facility. Part of this evaluation should include whether other devices that are commercially available were reviewed or considered by the employer and whether there is evidence that other engineering controls would more effectively reduce exposures. Such evidence might include CDC studies of efficacy, pilot tests by the employer, or data available in published studies.

The OSHA 1999 Record Summary indicates that employers are using safer equipment and devices; for example, more than 87 percent of the respondents who provided information on device usage now use needleless or shielded needle IV line access. Other popular devices include blunt suture needles, safer syringes, and safer phlebotomy devices. This is not an exhaustive list of effective engineering controls that are available. The WISHA web page at <http://www.lni.wa.gov/wisha/p-ts/BBPathogens> provides links to resources to assist in identifying safer devices.

Examples of effective engineering controls can also be found in several links to OSHA’s Needlestick Injuries web page:
<http://www.osha-slc.gov/SLTC/needlestick/index.html>.

2. If, based on such an analysis, WISHA staff identifies engineering or work practice control violations, they should be cited according to the following guidance.
 - If the employer has failed to use appropriate engineering or work practice controls “to eliminate or minimize exposure,” a violation of WAC 296-62-08001(4)(b)(i) should be cited using that language (normally classified as serious).
 - If the employer *is* using engineering or work practice controls but the consultant or inspector determines that a more effective alternative is available, a violation of WAC 296-62-08001(4)(b)(i) should be issued *only* following consultation with the IH Compliance Supervisor and the Occupational Health Nurse in WISHA Policy & Technical Services.
 - If appropriate engineering or work practice controls *are* in use, the inspection or consultation should take into consideration that the availability or use of an engineering control is not enough to guarantee that an employee cannot be injured. Employee acceptance and employee training are required for the engineering control to be effective. The consultant or inspector should evaluate the training and, if appropriate, cite a violation WAC 296-62-08001(7)(b)(vii). Such violations should be grouped with violations of WAC 296-62-08001(4)(b)(i) *if* the inspector determines that inadequate training caused the failure to use such controls.
 - WAC 296-62-08001(4)(b)(i) should not be cited where another provision of the standard mandates a specific engineering or work practice control (for example, paragraph (4)(d)(iii)(A) for sharps containers and paragraph (4)(b)(vii) for the prohibition of recapping). Instead, the more specific provision should be cited.
 - If the consultant or inspector determines that the employer is not fulfilling his or her responsibility to regularly examine and repair and/or replace engineering controls as often as necessary to ensure that each control is maintained and that it provides the protection intended, WAC 296-62-08001(4)(b)(ii) should be cited.

C. Training violations

a. *How should violations of the training requirements be documented?*

Possible training violations should be assessed using employee interviews, a review of training records, and an assessment of employee competence in areas to be covered by training. A violation should *not* be based solely on documented violations of other, specific elements of the standard.

b. *How should violations of training requirements be grouped with other violations?*

Training violations should be grouped in accordance with the existing WISHA policy guidance. Training violations should *not* be grouped with related elements of the standard *unless* the violations are being grouped to make a serious violation out of multiple general violations.

D. Confidentiality of Records

WISHA staff must protect the confidentiality of any individual medical records obtained or relied upon during the inspection. If requested, his or her review of these records must be conducted in the presence of the medical record holder (or other employer-designated healthcare professional). Before seeking to obtain file copies of information more detailed than the fact of compliance or noncompliance, WISHA staff must seek a Medical Access Order from the Occupational Health Nurse in WISHA Policy & Technical Services.

Approved: _____

Michael A. Silverstein

Assistant Director for WISHA Services

For further information about this or other WISHA Regional Directives, you may contact WISHA Policy & Technical Services at P.O. Box 44648 or by telephone at (360)902-5503. You also may review policy information on the WISHA Website (<http://www.wa.gov/lni/wisha>).

APPENDICES

WEBSITE RESOURCES

A. IMMUNIZATION OF HEALTH-CARE WORKERS

This appendix lists the URLs for the Centers for Disease Control, *Morbidity and Mortality Weekly Report*: “Immunization of Health-Care Workers. Recommendations of the Advisory Committee on Immunization Practices (APIC) and the Hospital Infection Control Practices Advisory Committee (HICPAC).” December 26, 1997, Vol.46, No.RR-18. The Adobe Acrobat pdf version contains the text of the report. The CDC has the text of this report available on their website:

<http://www.cdc.gov/epo/mmwr/preview/mmwrhtml/00050577.htm>.

B. RECOMMENDATIONS FOR PREVENTION AND CONTROL OF HEPATITIS C

This appendix lists the URLs for the Centers for Disease Control *Morbidity and Mortality Weekly Report*: “Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Disease.” October 16, 1998, Vol.47/No.RR-19. The Adobe Acrobat pdf version contains the text of the report. The CDC has the text of this report available on their website:

<http://www.cdc.gov/epo/mmwr/preview/mmwrhtml/00055154.htm>

C. GUIDELINES FOR THE MANAGEMENT OF HEALTHCARE WORKER EXPOSURES

This appendix lists the URLs for the Centers for Disease Control *Morbidity and Mortality Weekly Report*: “Public Health Service Guidelines for the Management of Health-Care Worker Exposures to HIV and Recommendations for Post-exposure Prophylaxis.” May 15, 1998, Vol. 47, No. RR-7. The Adobe Acrobat pdf version contains the text of the report. The CDC has the text of this report available on their website:

<http://www.cdc.gov/epo/mmwr/preview/mmwrhtml/00052722.htm>

and RR-7 Appendix:

<http://www.cdc.gov/epo/mmwr/preview/mmwrhtml/00052801.htm>

D. LABOR & INDUSTRIES/WISHA WEB PAGES (<http://www.lni.wa.gov/wisha>)

- Bloodborne Pathogens: <http://www.lni.wa.gov/wisha/p-ts/BBPathogens/>
- Needlestick Injury Prevention: <http://www.lni.wa.gov/wisha/p-ts/needlestick/>